

**REMARKS**

Claims 15-27 are presently pending in this application. Claim 15 have been amended to more particularly define the claimed invention. Claims 24-27 have been added to claim additional features of the claimed invention.

It is noted that the amendments are made only to more particularly define the invention and not for distinguishing the invention over the prior art, for narrowing the scope of the claims, or for any reason related to a statutory requirement for patentability. It is further noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 15-17, 19-20 and 22-23 stand rejected under 35 U.S.C. §103(e) as being unpatentable over Kaschke, U.S. Pat. No. 5,999,821, further in view of Azima et al., WO 00/02417 and further in view of Tsuchiya, et al., GB 2055014.

Claims 18 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417, further in view of Azima et al., WO 00/02417 and Tsuchiya, et al., GB 2055014, and further in view of Porrazzo et al., U.S. Pat. No. 5,872,855.

These rejections are respectfully traversed in view of the following discussion.

**I. APPLICANT'S CLAIMED INVENTION**

The claimed invention (as defined, for example, by independent claim 15) is directed to an electronic device including a main body, a display disposed on the main body for displaying information, a plate member having a transparent central section overlying the

display and a colored section adjacent the transparent central section and positioned other than overlying the display, and a driving unit connected to the colored section of the plate member for vibrating the plate member to cause the plate member to create a sound in response to an audio signal. The driving unit includes a planar voice coil, a resilient member, a support section moveably attached to the colored section of the plate member by the resilient member, and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section. This allows the configuration of the planar voice coil and the first and second magnets to be compactly fit within a small place between the first and second supporting sections, (Application at page 7, lines 1-11.)

## II. THE ALLEGED PRIOR ART REJECTIONS

### A. The 35 U.S.C. § 103(e) Rejection over Kaschke, U.S. Pat. No. 5,999,821 further in view of Azima et al., WO 00/02417 and further in view of Tsuchiya, et al., GB 2055014

The Examiner alleges that Kaschke, U.S. Pat. No. 5,999,821, (Kaschke), further in view of Azima et al., WO 00/02417 and further in view of Tsuchiya, et al., GB 2055014, (Azima and Tsuchiya), makes obvious the invention of claims 15-17, 19-20 and 22-23.

Applicant submits, however, that neither Kaschke, Azima nor Tsuchiya, nor any alleged combination, teaches or suggests, a *“driving unit comprising: a planar voice coil; a resilient member, a support section moveably attached to the colored section of the plate member by said resilient member; and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section.”*

Kaschke discloses an electrode acoustic transducer 322, but fails to teach or suggest, *“driving unit comprising: a planar voice coil; a resilient member; a support section moveably attached to the colored section of the plate member by said resilient member; and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section.”*

Azima '417 discloses a coil vibration exciter 48 attached to a transparent cover 46, and a resilient suspension 50. However, Azima '417 fails to teach or suggest, *“driving unit comprising: a planar voice coil; a resilient member; a support section moveably attached to the colored section of the plate member by said resilient member; and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section.”*

Tsuchiya discloses a square diaphragm 1 provided with a voice coil bobbin 2 to which is formed by combining for bobbin frames 21 respectively parallel to the four sides of the square diaphragm. A first end portion 21a of each bobbin frame 21 is bonded to the diaphragm of 1, while a second end portion or flange 21b thereof is fixedly bonded to a voice coil 3. The voice coil 3 is positioned in the air gap between magnets 5 and 5' which are of different magnetic polarity and which are fixedly secured to the ends of plates 4 and 4'. (Page 1, lines 75-88.)

Tsuchiya discloses the voice coil 3 is fixedly attached to and drives a square diaphragm 1 while positioned in an air gap between magnets 5 and 5' that are fixedly secured to plates 4 and 4', respectively.

Tsuchiya fails to teach or suggest magnets 5 and 5' fixedly attached to a support

section 4 and 4' that is attached to the drive unit by a resilient member. Tsuchiya discloses that magnets 5 and 5' are fixedly attached to the ends of plates 4 and 4', where the voice coil 3 attached to the voice coil bobbin 2 and the square diaphragm 1 moves with respect to magnets 5 and 5'. Applicant's claimed invention may be considered as the opposite, in that the first and second magnets are fixedly attached to the support section and may be enabled to move with respect to the colored section of the plate member by means of a resilient member attached to the colored section of the plate member.

Thus, Tsuchiya fails to teach or suggest Applicant's claimed invention of a "*driving unit comprising: a planar voice coil; a resilient member; a support section moveably attached to the colored section of the plate member by said resilient member; and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section.*"

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection since the alleged prior art references (alone or in combination) fail to teach or suggest each and every element and feature of Applicant's claimed invention.

**B. The 35 U.S.C. § 103(a) Rejection over Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417 further in view of Azima et al., WO 00/02417 and Tsuchiya, et al., GB 2055014, and further in view of Porrazzo et al., U.S. Pat. No. 5,872,855**

The Examiner alleges that Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417, (Kaschke and Azima), further in view of Azima et al., WO 00/02417 and Tsuchiya, et al., GB 2055014, and further in view of Porrazzo et al., U.S. Pat. No. 5,872,855, (Azima, Tsuchiya and Porrazzo), makes obvious the invention of claims 18 and 21.

With respect to the rejection of Applicant's claims 18 and 21, Applicant respectfully submits neither Kaschke, Azima, Tsuchiya nor Porrazzo, nor any alleged combination, teaches or suggests, "*driving unit comprising: a planar voice coil; a resilient member; a support section moveably attached to the colored section of the plate member by said resilient member; and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section,*" of Applicant's independent claim 15.

Please see Applicant's arguments above in section A. with respect to the disclosures of Kaschke, Azima and Tsuchiya failing to teach or suggest Applicant's claimed invention.

Porrazzo discloses the formation of a voice coil by printing conductors, such as a conductive ink, on an insulating material and a fixing the printed conductor to a substrate carrier. However, Porrazzo fails to teach or suggest, "*driving unit comprising: a planar voice coil; a resilient member; a support section moveably attached to the colored section of the plate member by said resilient member; and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil, wherein the first and second magnets are fixedly attached to the support section.*"

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection since the alleged prior art references (alone or in combination) fail to teach or suggest each and every element and feature of Applicant's claimed invention.

**C. Newly Added Independent Claim 25 with Respect to the Applied Prior Art References**

Applicant adds new claims 24-27 to provide more protection for the claimed invention and to claim additional features of invention. These claims are independently patentable

because of the novel features recited therein.

Applicant maintains that new claims 24-27 are patentable over any combination of the applied references at least for analogous reasons to those set forth above with respect to claims 15-23.

With respect to Applicant's newly added independent claim 25, the applied prior art references and any combination thereof fail to teach or suggest, "a resilient member; a support section moveably attached to a plate member by said resilient member, and a first magnet disposed inside said planar voice coil and a second magnet disposed outside said planar voice coil, wherein said first and said second magnets are fixedly attached to said support section."

Therefore, none of the cited prior art references nor any alleged combination thereof teaches or suggests these features of Applicant's claimed invention with respect to newly added claims 24-27.

### III. FORMAL MATTERS AND CONCLUSION

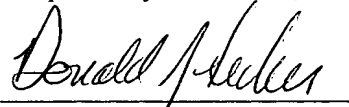
In view of the foregoing, Applicant submits that claims 15-27 all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

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Respectfully Submitted,



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